

Although a preferred embodiment of the invention has been described with some particularly, many modifications and variations of that embodiment may be made without deviating from the invention. Therefore, it is to be understood that, within the scope of the claims, the invention may be practiced otherwise than as specifically described.

What is claimed is:

1. A sample collector for transferring liquid from a body of liquid to plurality of containers comprising: a conduit means having a flow passage, an inlet port and an outlet port;  
said inlet port being adapted to be inserted in a body of liquid;  
means for positioning said outlet port sequentially over certain of said plurality of containers, whereby samples of said liquid may be inserted into said containers;  
pump means operatively coupled to said conduit means for selectively pumping liquid through said flow passage between said inlet port and said outlet port for insertion into said different ones of said plurality of containers;  
control means coupled to said pump means for controlling the pumping operation thereof;  
detection means operatively coupled to said conduit means at a predetermined position between said pump means and said outlet port for detecting the presence of a liquid interface within said conduit means at said position and providing a signal representative thereof; and  
said control means including means for controlling the volume of liquid pumped through said conduit means by said pump means from the time said interface signal is received, whereby a predetermined volume of liquid is applied to said selected container.
2. A sample collector according to claim 1 in which said control means further includes a means for reversing said pump after said predetermined volume has been pumped into said containers, whereby said fluid passage is cleared.

3. A sample collector according to claim 2 in which said detector means is a means for detecting changes in infrared light absorbance.

4. The sample collector of claim 3 in which:  
said pump means includes a drive means, the motion of which is proportional to the amount of liquid pumped; and  
said control means includes a means for measuring the amount of motion of said drive means and means for applying a signal after a preset amount of motion to said pump means to terminate pumping in the same direction.

5. A sample collector according to claim 4 in which said pump means includes a peristaltic pump and said control means includes counter means for counting revolutions of said peristaltic pump.

6. A sample collector according to claim 1 in which said detector means is a means for detecting changes in capacitance.

7. The sample collector of claim 6 in which:  
said pump means includes a drive means, the motion of which is proportional to the amount of liquid pumped; and  
said control means includes a means for measuring the amount of motion of said drive means and means for applying a signal after a preset amount of motion to said pump means to terminate pumping in the same direction.

8. A sample collector according to claim 7 in which said pump means includes a peristaltic pump and said control means includes counter means for counting revolutions of said peristaltic pump.

9. The sample collector of claim 1 in which:  
said pump means includes a drive means, the motion of which is proportional to the amount of liquid pumped; and  
said control means includes a means for measuring the amount of motion of said drive means and means for applying a signal after a preset amount of motion to said pump means to terminate pumping in the same direction.

10. A sample collector according to claim 9 in which said pump means includes a peristaltic pump and said control means includes counter means for counting revolutions of said peristaltic pump.

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